Document - 2005-12-15 15:05:14

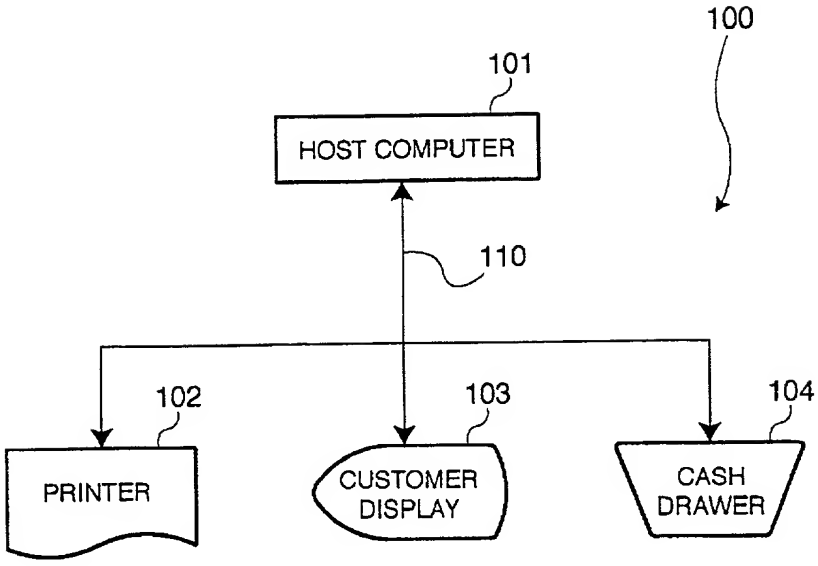

FIG. 1

Document 2004/0243504

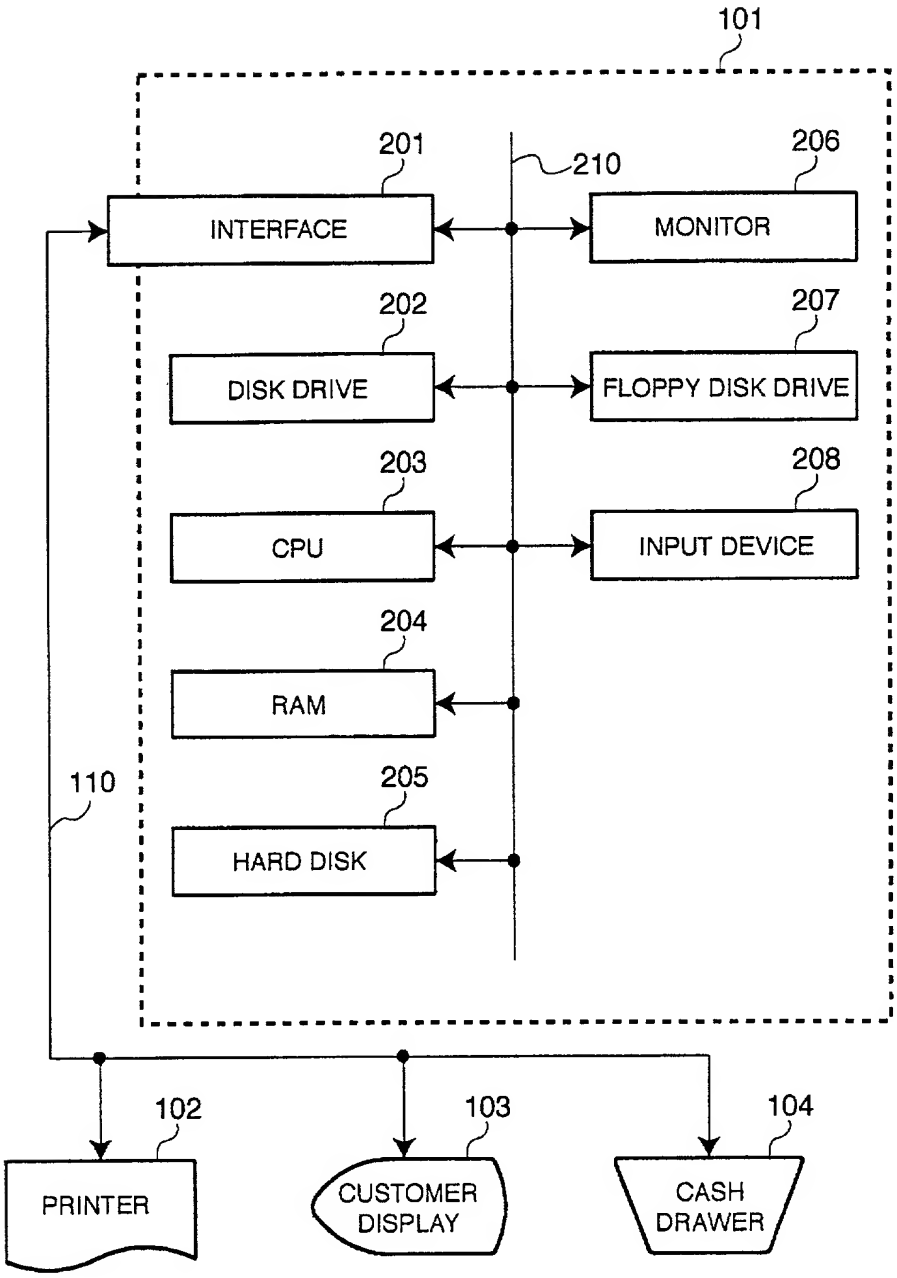

FIG. 2

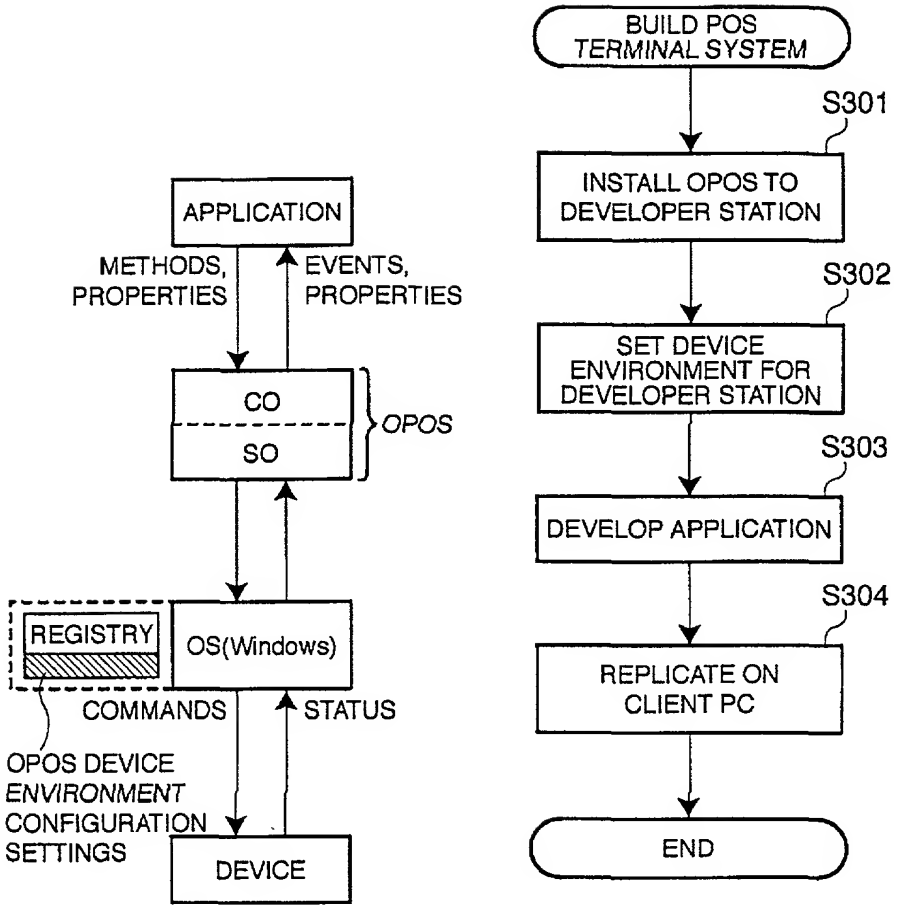
APPLICATION
METHODS, PROPERTIES
EVENTS, PROPERTIES
CO
SO
OPOS
REGISTRY
OS(Windows)
COMMANDS
STATUS
OPOS DEVICE ENVIRONMENT CONFIGURATION SETTINGS
DEVICE
(a)
BUILD POS TERMINAL SYSTEM
S301
INSTALL OPOS TO DEVELOPER STATION
S302
SET DEVICE ENVIRONMENT FOR DEVELOPER STATION
S303
DEVELOP APPLICATION
S304
REPLICATE ON CLIENT PC
END
(b)

FIG. 3

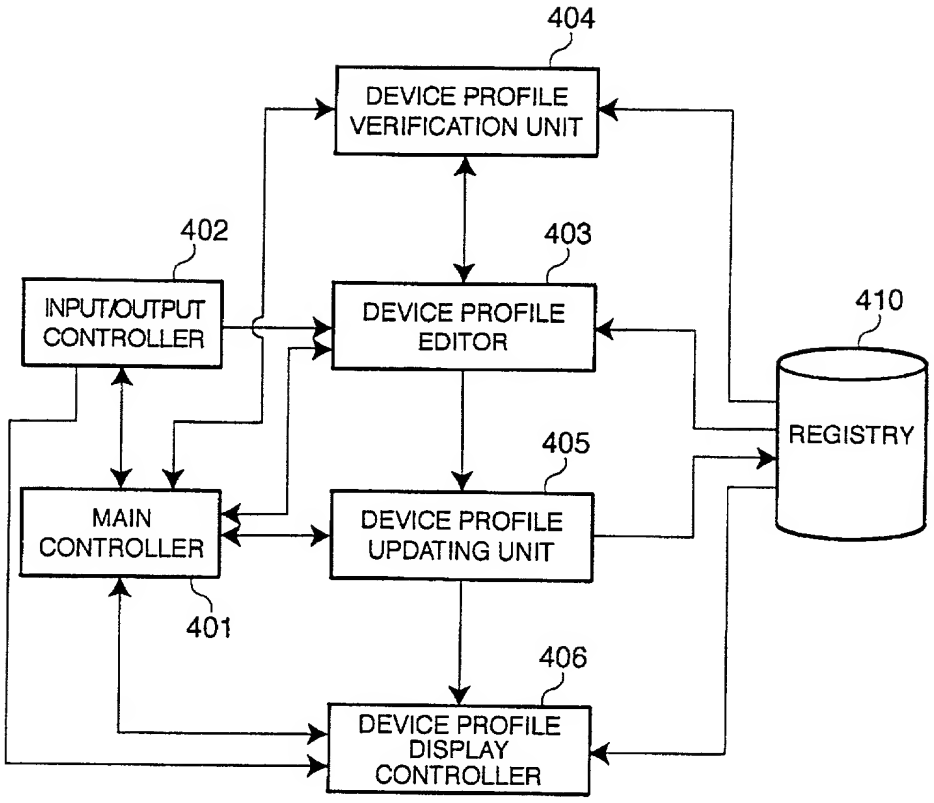
404
DEVICE PROFILE VERIFICATION UNIT
402
403
INPUT/OUTPUT CONTROLLER
DEVICE PROFILE EDITOR
410
REGISTRY
405
MAIN CONTROLLER
DEVICE PROFILE UPDATING UNIT
401
406
DEVICE PROFILE DISPLAY CONTROLLER

FIG. 4

Patent Application Publication

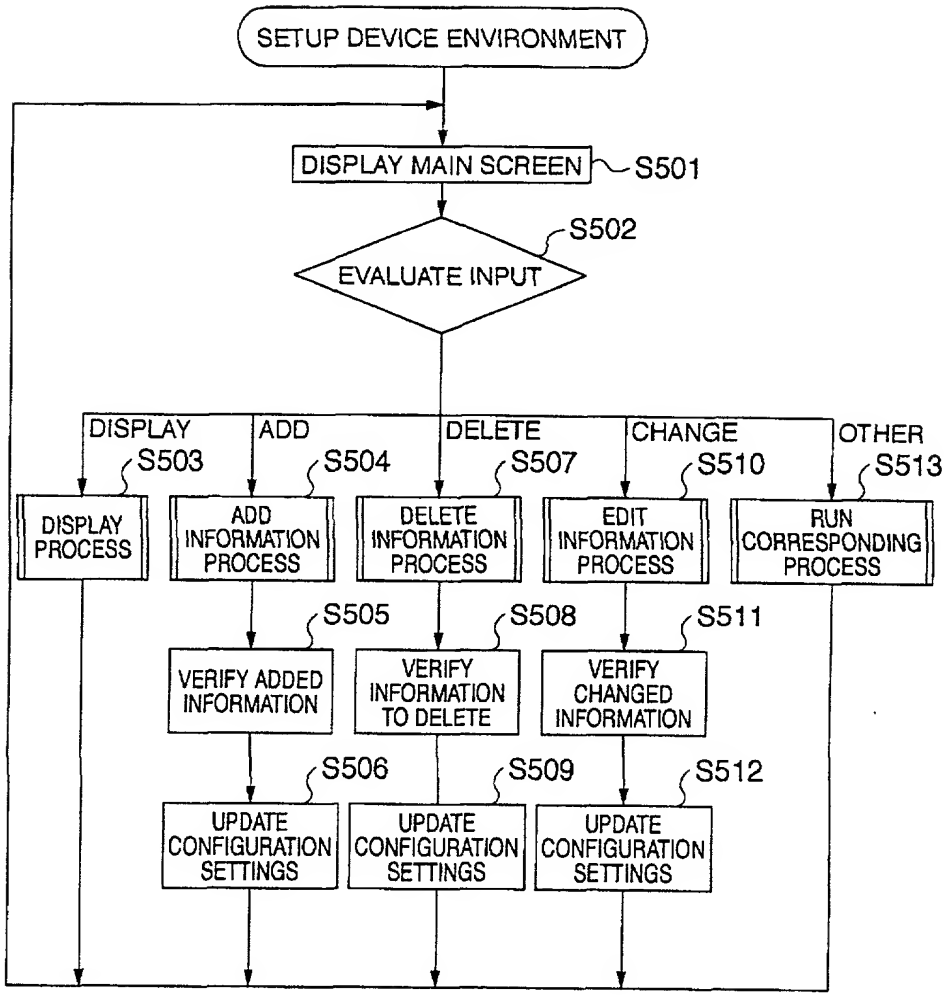

FIG. 5

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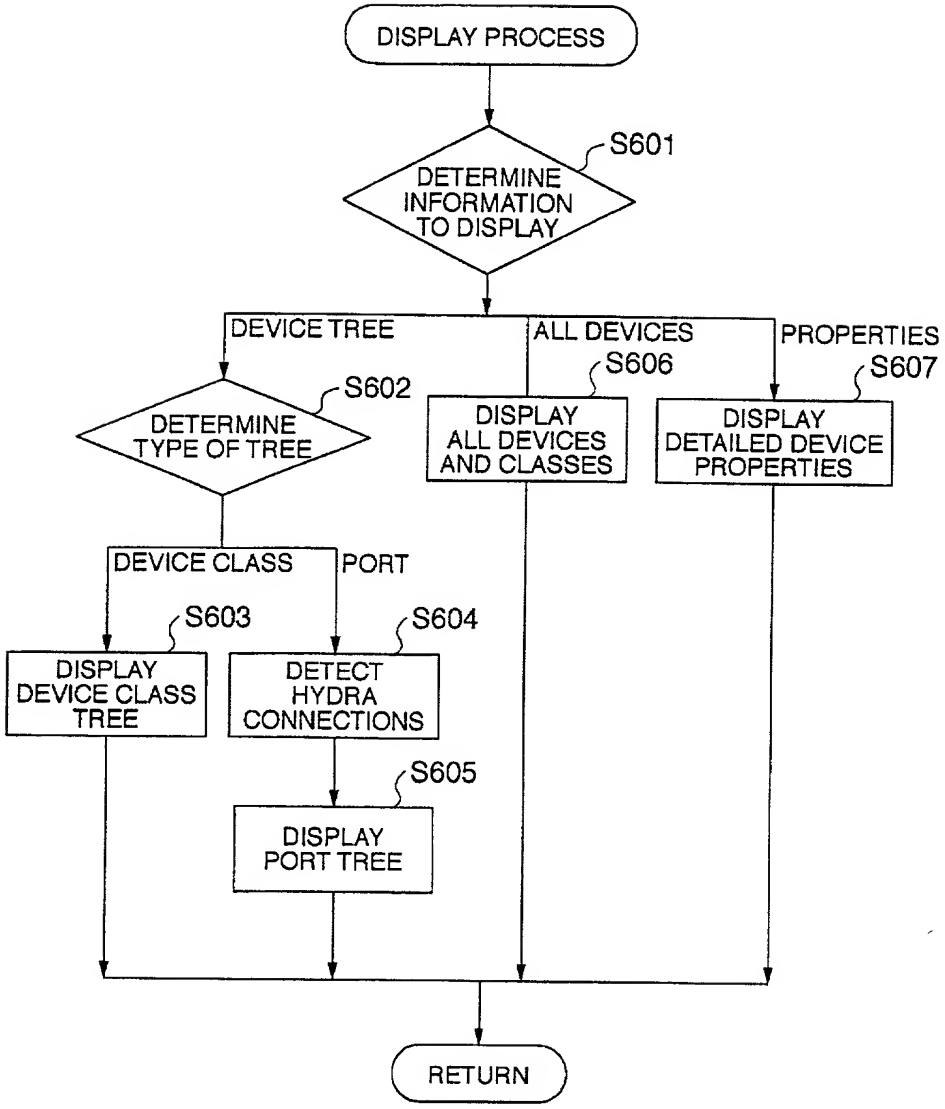

FIG. 6

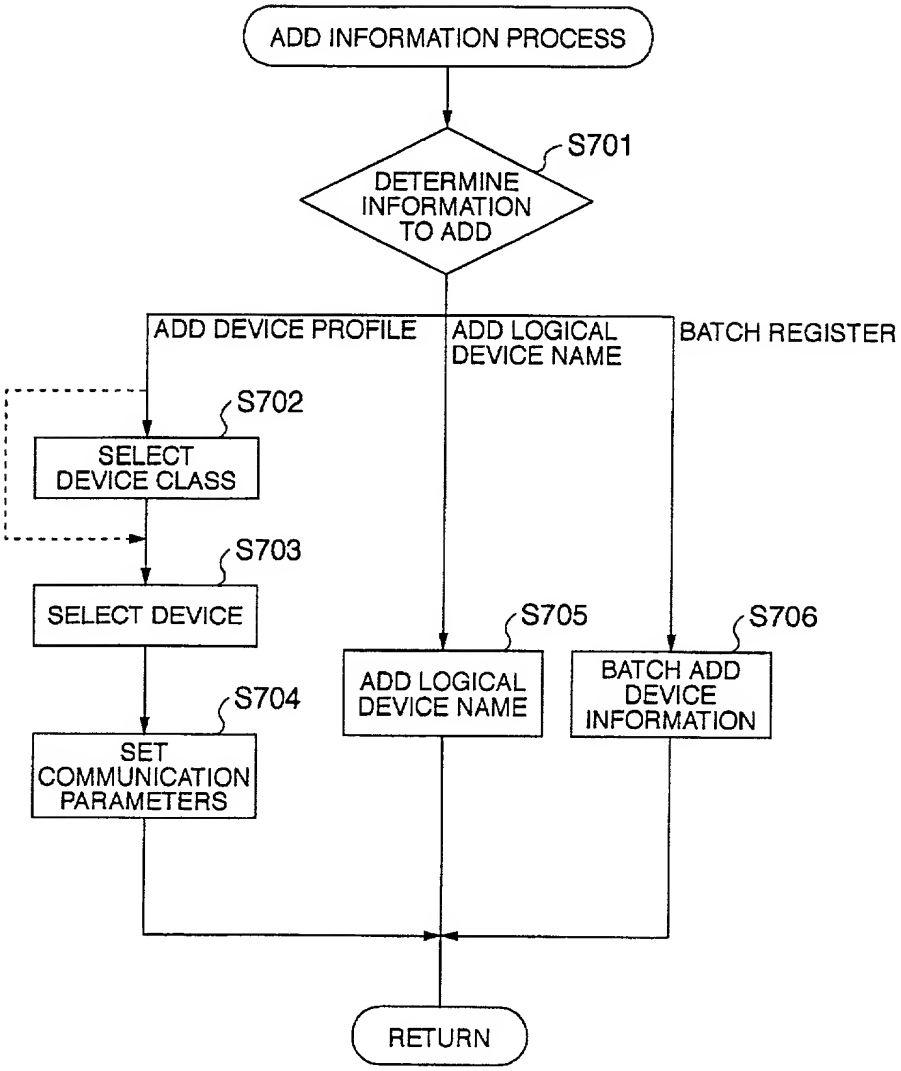
ADD INFORMATION PROCESS
S701
DETERMINE INFORMATION TO ADD
ADD DEVICE PROFILE
ADD LOGICAL DEVICE NAME
BATCH REGISTER
S702
SELECT DEVICE CLASS
S703
SELECT DEVICE
S704
SET COMMUNICATION PARAMETERS
S705
ADD LOGICAL DEVICE NAME
S706
BATCH ADD DEVICE INFORMATION
RETURN

FIG. 7

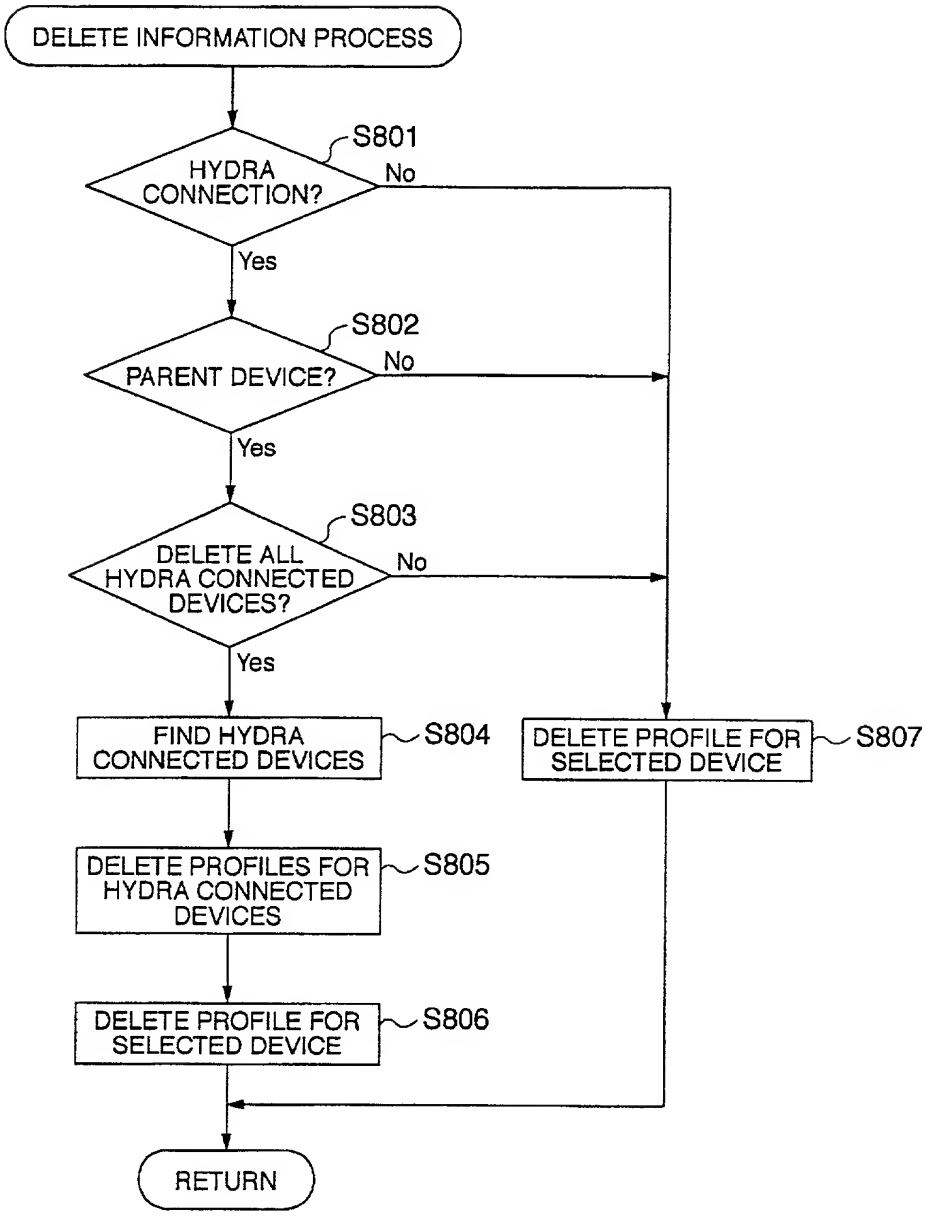
DELETE INFORMATION PROCESS
S801
HYDRA CONNECTION?
No
Yes
S802
PARENT DEVICE?
No
Yes
S803
DELETE ALL HYDRA CONNECTED DEVICES?
No
Yes
FIND HYDRA CONNECTED DEVICES
S804
DELETE PROFILES FOR HYDRA CONNECTED DEVICES
S805
DELETE PROFILE FOR SELECTED DEVICE
S806
DELETE PROFILE FOR SELECTED DEVICE
S807
RETURN

FIG. 8

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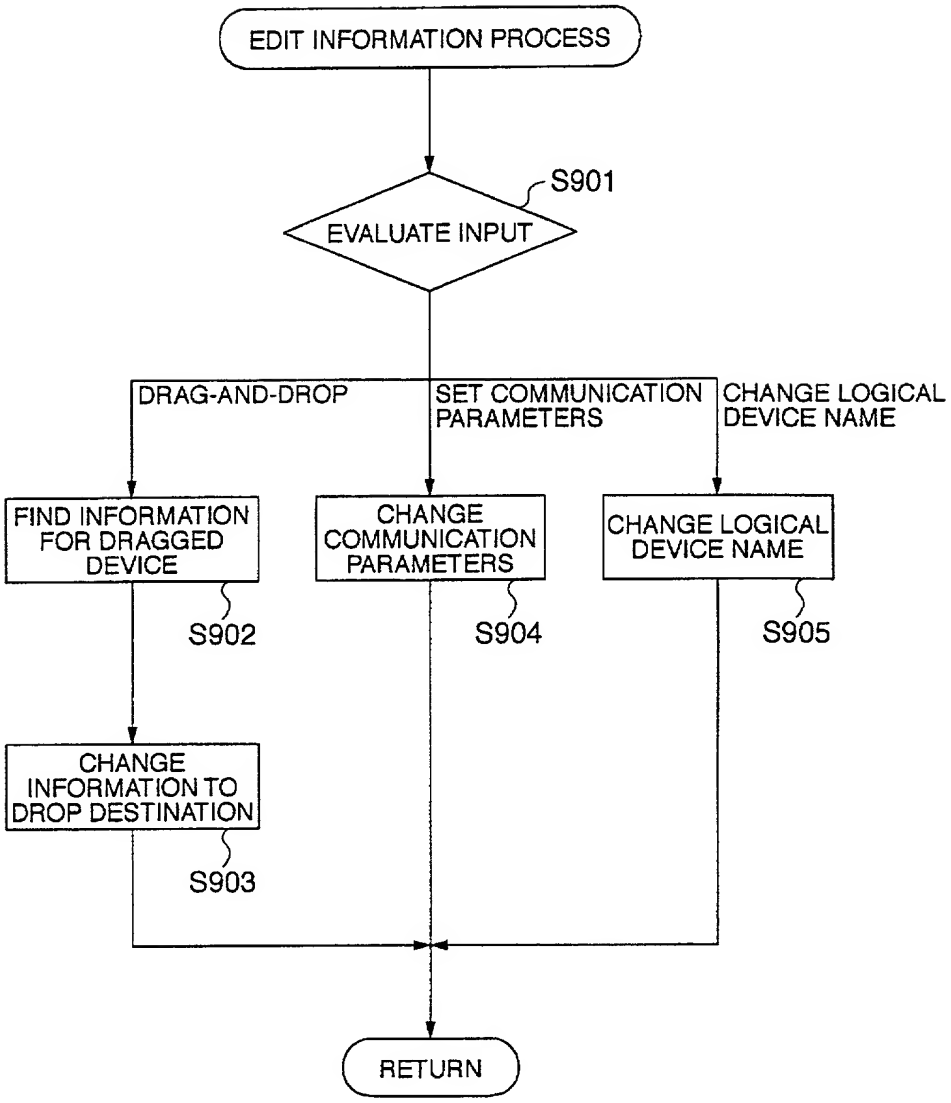


FIG. 9

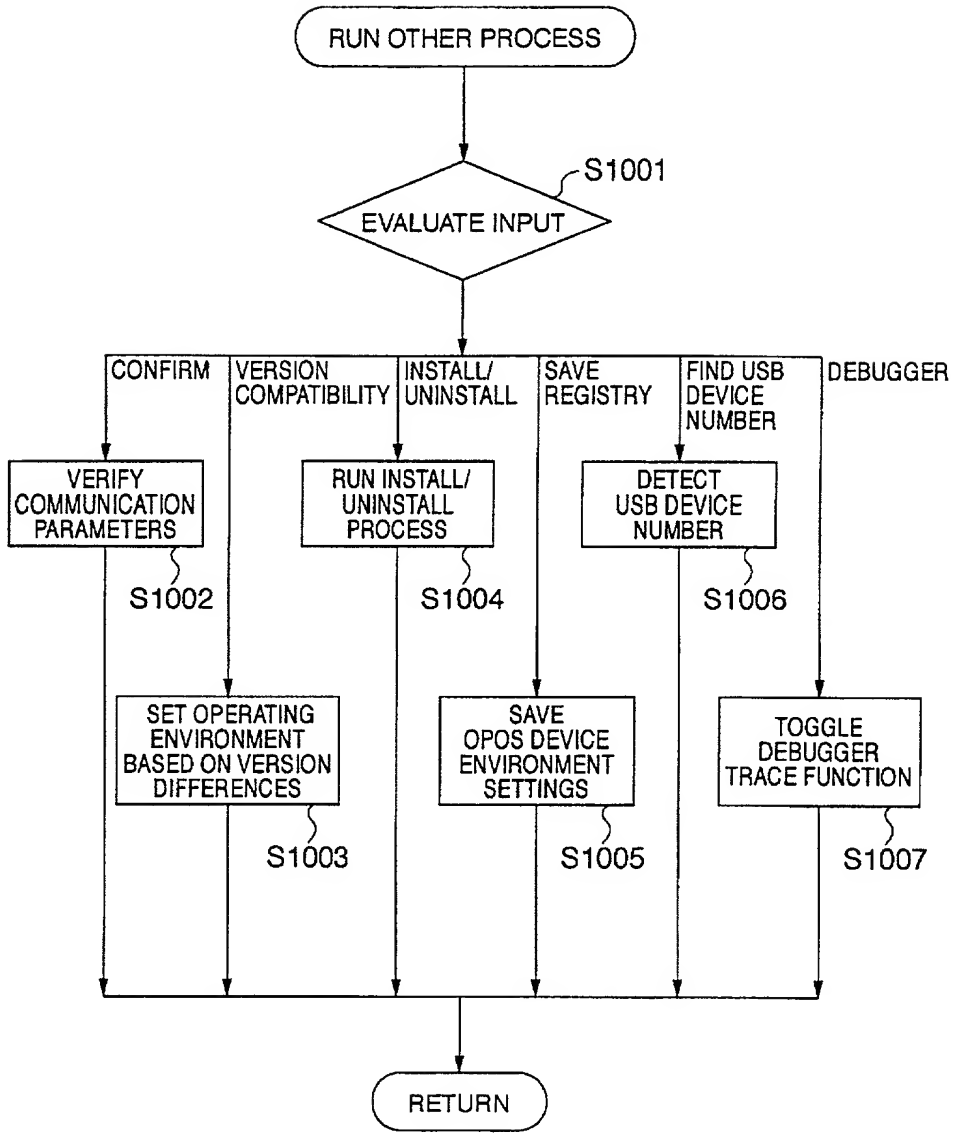

RUN OTHER PROCESS
S1001
EVALUATE INPUT
CONFIRM
VERSION COMPATIBILITY
INSTALL/ UNINSTALL
SAVE REGISTRY
FIND USB DEVICE NUMBER
DEBUGGER
VERIFY COMMUNICATION PARAMETERS
S1002
RUN INSTALL/ UNINSTALL PROCESS
S1004
DETECT USB DEVICE NUMBER
S1006
SET OPERATING ENVIRONMENT BASED ON VERSION DIFFERENCES
S1003
SAVE OPOS DEVICE ENVIRONMENT SETTINGS
S1005
TOGGLE DEBUGGER TRACE FUNCTION
S1007
RETURN

FIG. 10

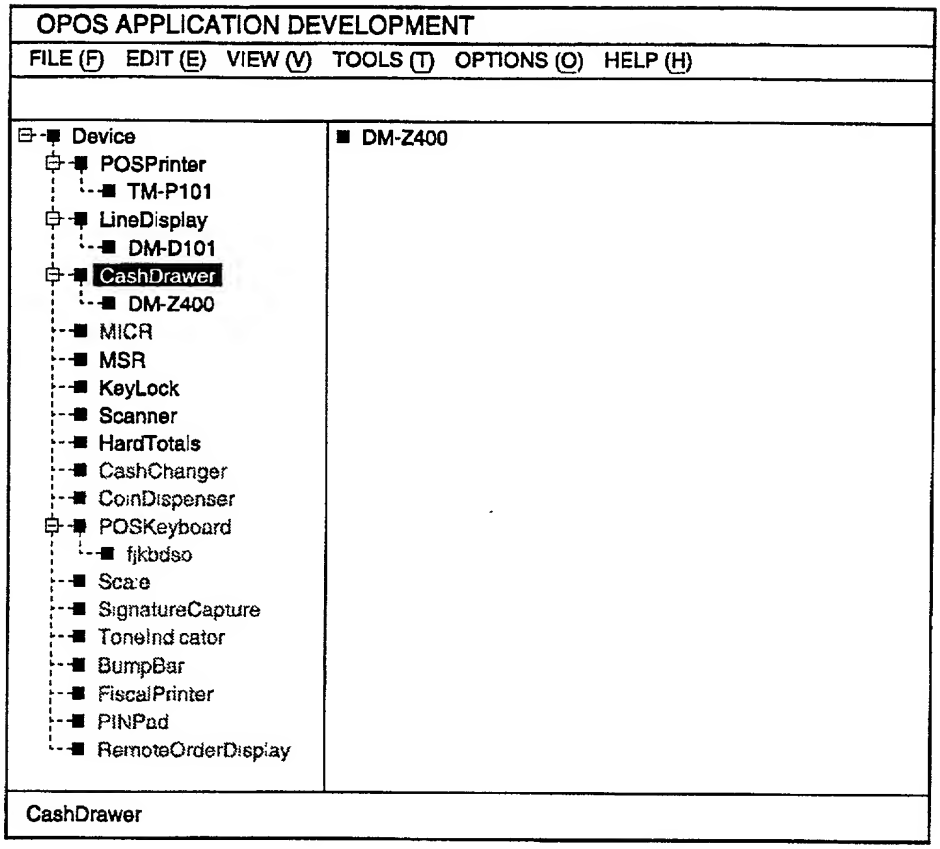
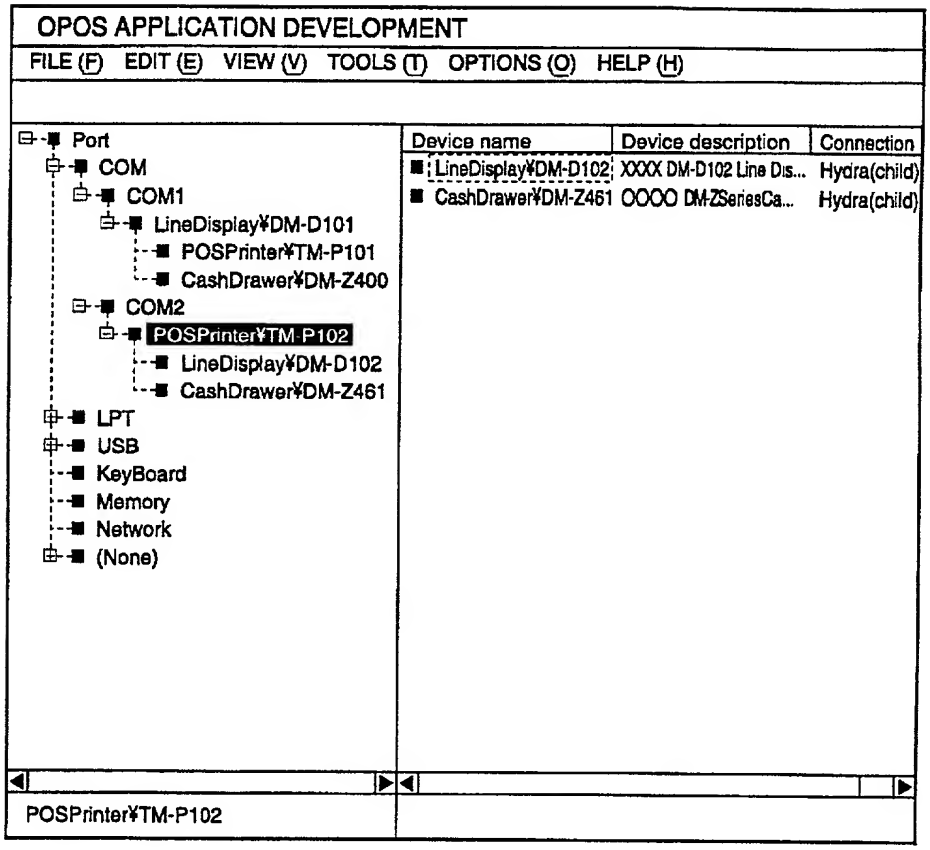

OPOS APPLICATION DEVELOPMENT
FILE (F) EDIT (E) VIEW (V) TOOLS (T) OPTIONS (O) HELP (H)
Device
POSPrinter
TM-P101
LineDisplay
DM-D101
CashDrawer
DM-Z400
MICR
MSR
KeyLock
Scanner
HardTotals
CashChanger
CoinDispenser
POSKeyboard
fjkbdso
Scale
SignatureCapture
ToneInd cator
BumpBar
FiscalPrinter
PINPad
RemoteOrderDisplay
DM-Z400
CashDrawer

FIG. 11

(a)


OPOS APPLICATION DEVELOPMENT
FILE (F) EDIT (E) VIEW (V) TOOLS (T) OPTIONS (O) HELP (H)
Port
COM
COM1
LineDisplay¥DM-D101
POSPrinter¥TM-P101
CashDrawer¥DM-Z400
COM2
POSPrinter¥TM-P102
LineDisplay¥DM-D102
CashDrawer¥DM-Z461
LPT
USB
KeyBoard
Memory
Network
(None)
Device name
Device description
Connection
LineDisplay¥DM-D102
XXXX DM-D102 Line Dis...
Hydra(child)
CashDrawer¥DM-Z461
OOOO DM-ZSeriesCa...
Hydra(child)
POSPrinter¥TM-P102

(b)

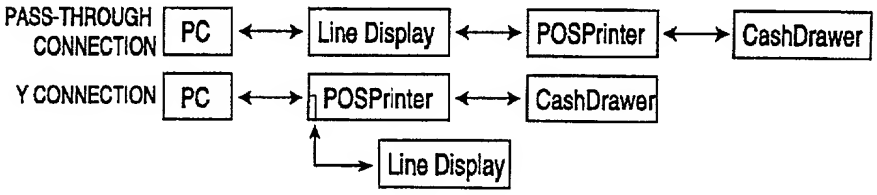

PASS-THROUGH CONNECTION
PC
Line Display
POSPrinter
CashDrawer
Y CONNECTION
PC
POSPrinter
CashDrawer
Line Display

FIG. 12

FIG.13(a)

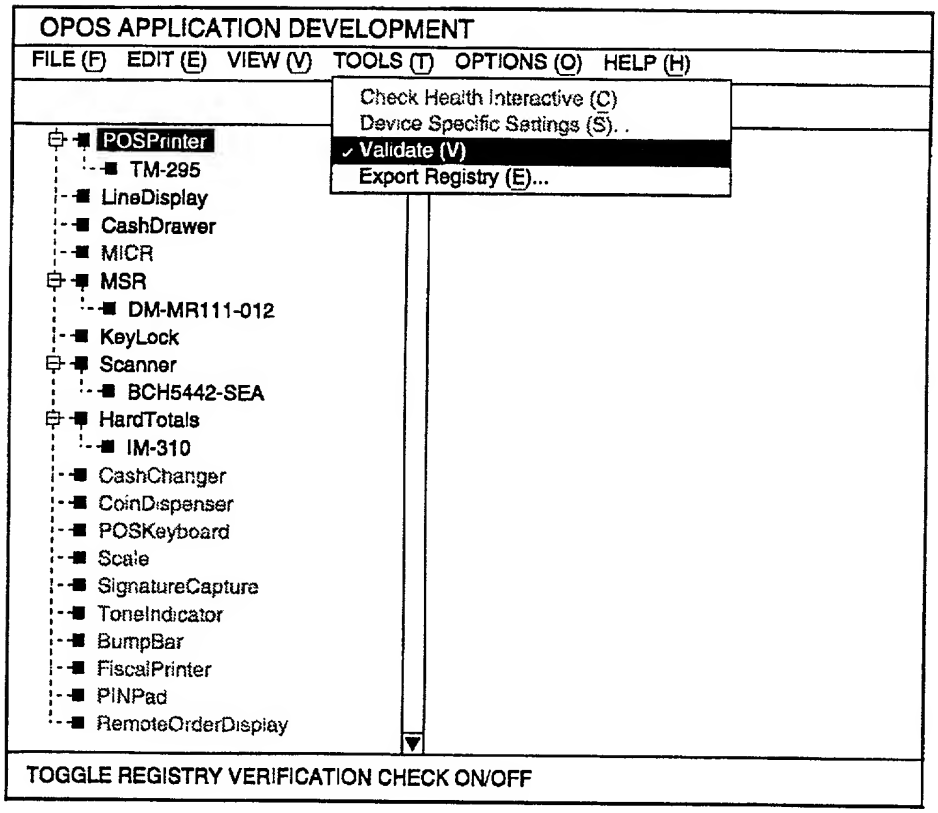


FIG.13(b)

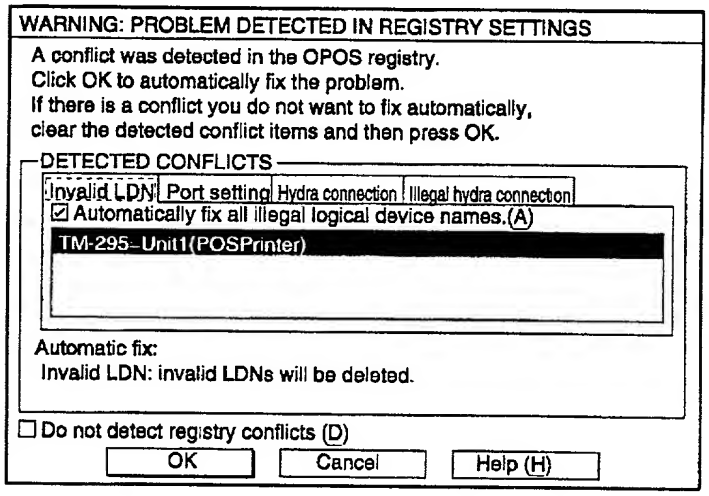


FIG. 14(a)

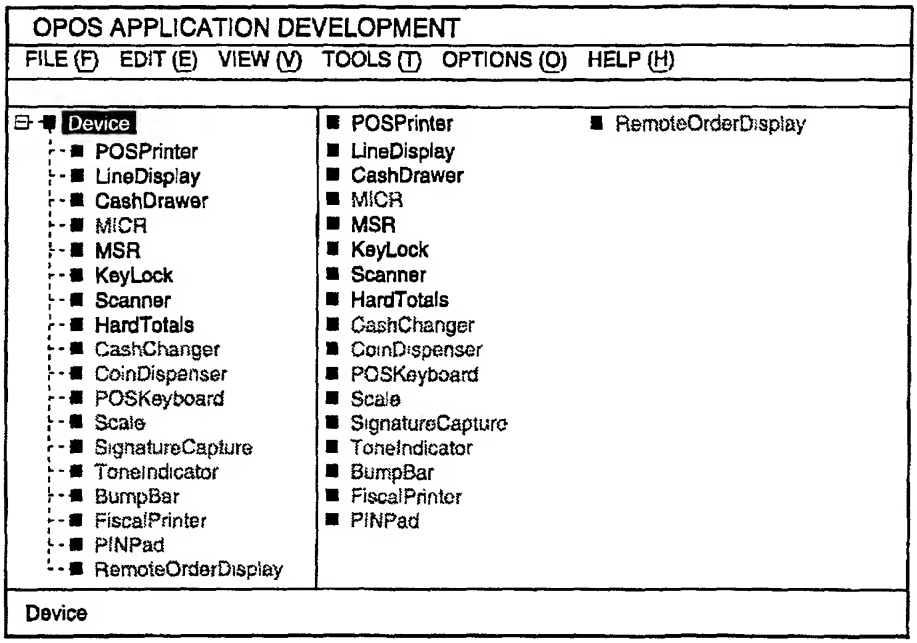
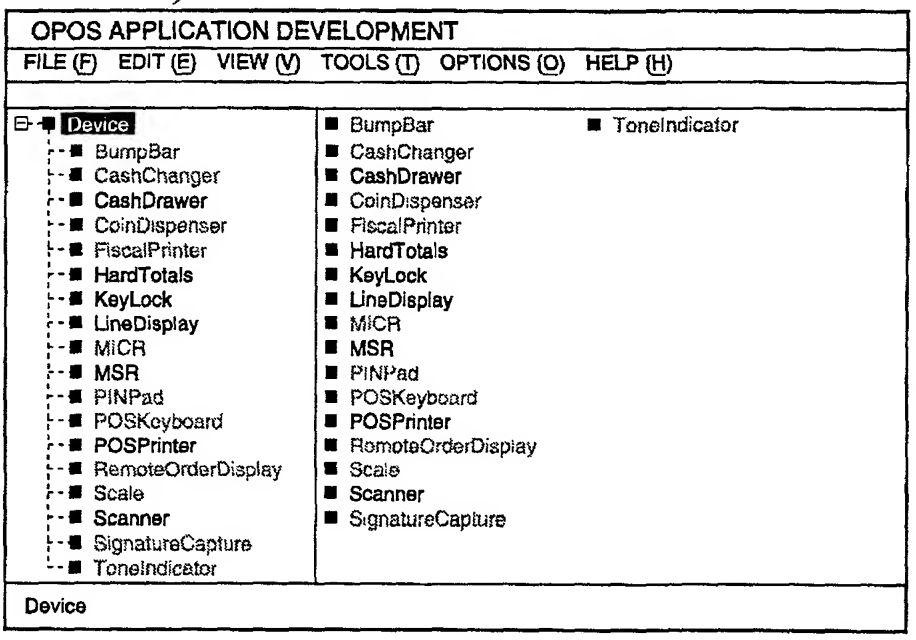


FIG. 14(b)



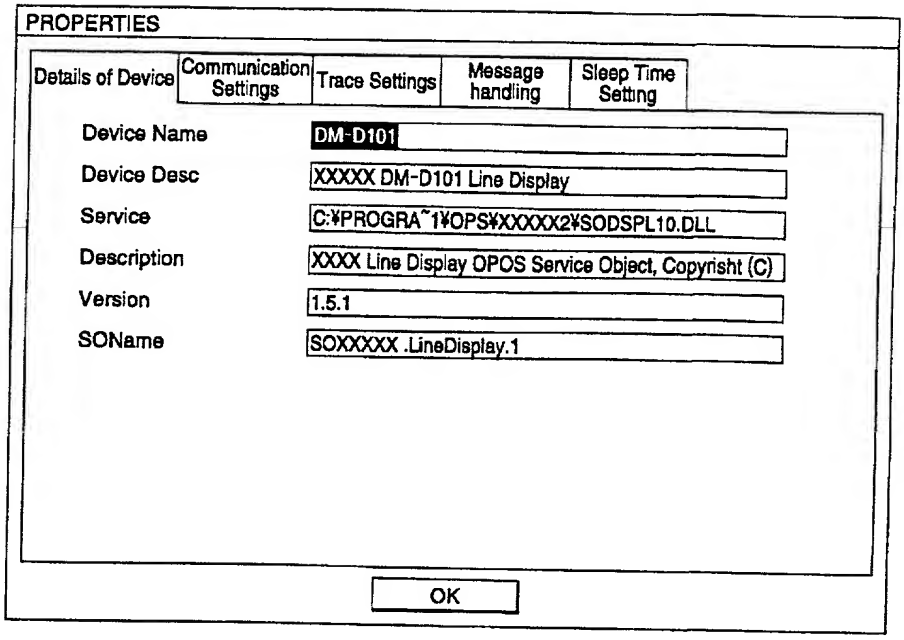

PROPERTIES
Details of Device
Communication Settings
Trace Settings
Message handling
Sleep Time Setting
Device Name
DM-D101
Device Desc
XXXXX DM-D101 Line Display
Service
C:¥PROGRA~1¥OPS¥XXXXX2¥SODSPL10.DLL
Description
XXXX Line Display OPOS Service Object, Copyrisht (C)
Version
1.5.1
SOName
SOXXXXX .LineDisplay.1
OK

FIG. 15

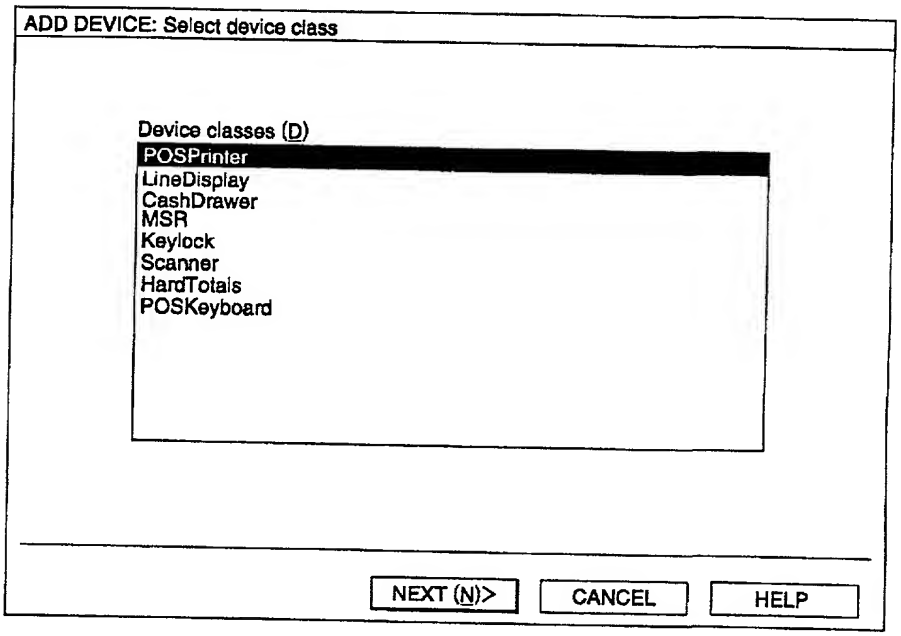

ADD DEVICE: Select device class
Device classes (D)
POSPrinter
LineDisplay
CashDrawer
MSR
Keylock
Scanner
HardTotals
POSKeyboard
NEXT (N)>
CANCEL
HELP

FIG. 16

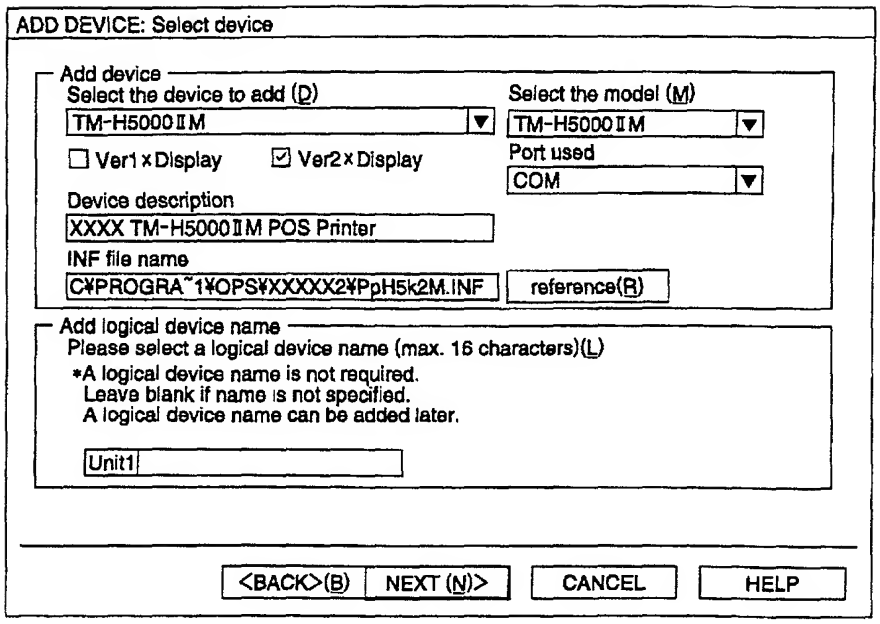

ADD DEVICE: Select device
Add device
Select the device to add (D)
TM-H5000IIM
Select the model (M)
TM-H5000IIM
Ver1 x Display
Ver2 x Display
Port used
COM
Device description
XXXX TM-H5000IIM POS Printer
INF file name
C¥PROGRA~1¥OPS¥XXXXX2¥PpH5k2M.INF
reference(R)
Add logical device name
Please select a logical device name (max. 16 characters)(L)
*A logical device name is not required.
Leave blank if name is not specified.
A logical device name can be added later.
Unit1
<BACK>(B)
NEXT (N)>
CANCEL
HELP

FIG. 17

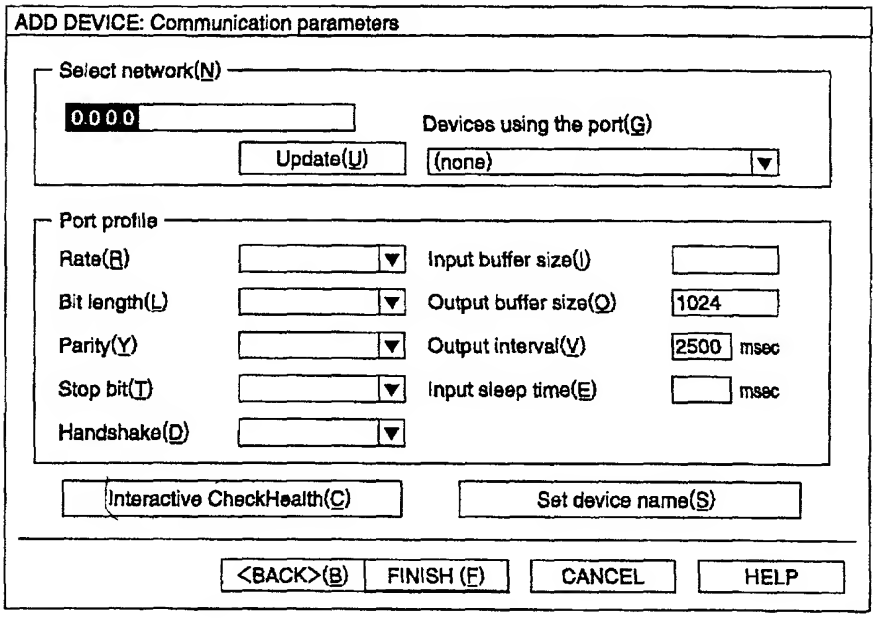

ADD DEVICE: Communication parameters
Select network(N)
0.0.0.0
Update(U)
Devices using the port(G)
(none)
Port profile
Rate(R)
Bit length(L)
Parity(Y)
Stop bit(T)
Handshake(D)
Input buffer size(I)
Output buffer size(O)
1024
Output interval(V)
2500
msec
Input sleep time(E)
msec
Interactive CheckHealth(C)
Set device name(S)
<BACK>(B)
FINISH (F)
CANCEL
HELP

FIG. 18

EPSON-HONG

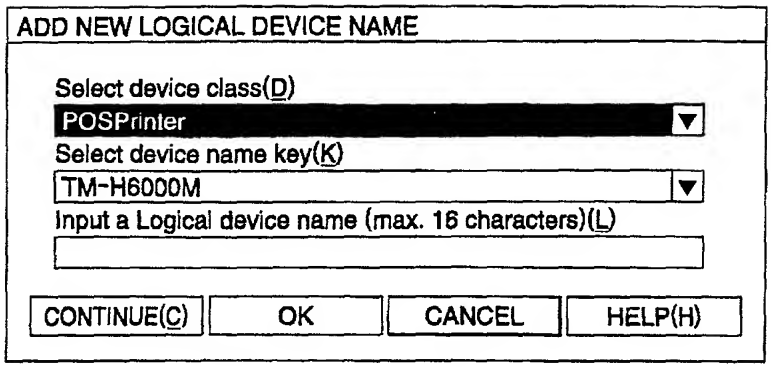


FIG. 19

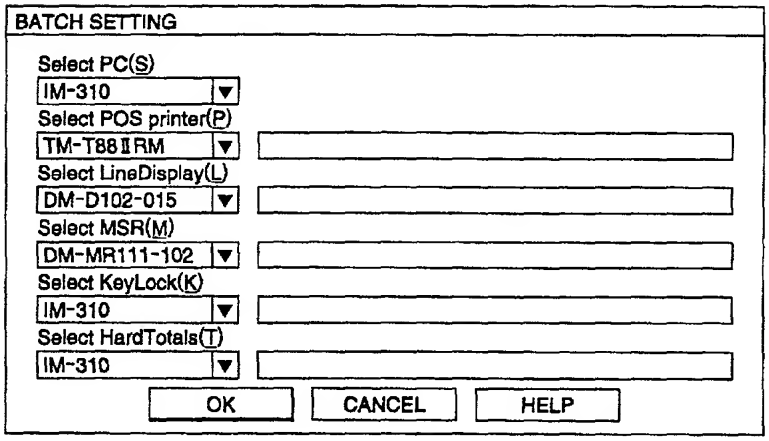


FIG. 20

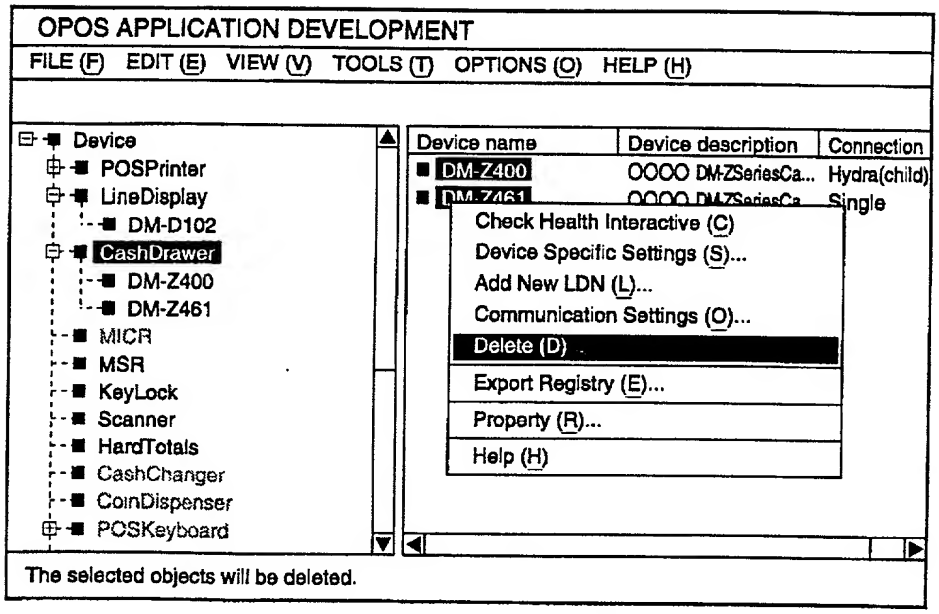

OPOS APPLICATION DEVELOPMENT
FILE (F) EDIT (E) VIEW (V) TOOLS (T) OPTIONS (O) HELP (H)
Device
POSPrinter
LineDisplay
DM-D102
CashDrawer
DM-Z400
DM-Z461
MICR
MSR
KeyLock
Scanner
HardTotals
CashChanger
CoinDispenser
POSKeyboard
Device name
Device description
Connection
DM-Z400
OOOO DM-ZSeriesCa...
Hydra(child)
Single
Check Health Interactive (C)
Device Specific Settings (S)...
Add New LDN (L)...
Communication Settings (O)...
Delete (D)
Export Registry (E)...
Property (R)...
Help (H)
The selected objects will be deleted.

FIG. 21

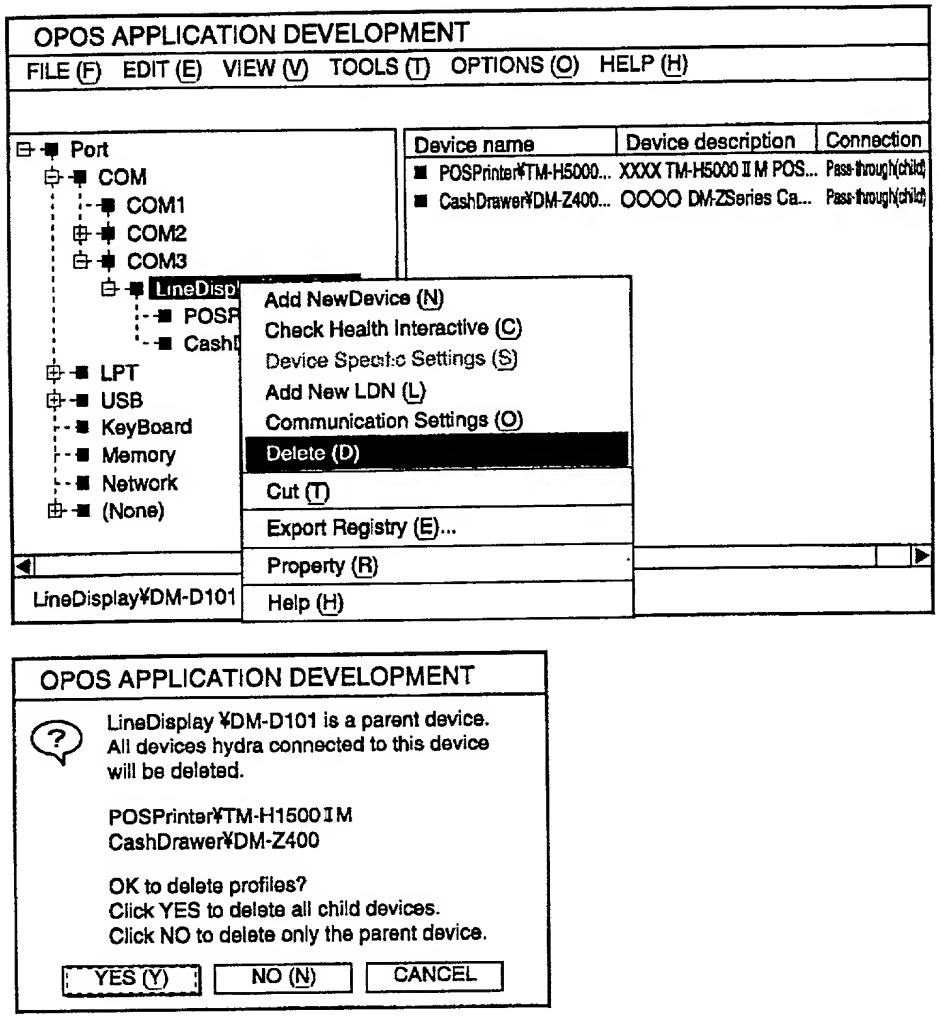

OPOS APPLICATION DEVELOPMENT
FILE (F) EDIT (E) VIEW (V) TOOLS (T) OPTIONS (O) HELP (H)
Port
COM
COM1
COM2
COM3
LPT
USB
KeyBoard
Memory
Network
(None)
Device name
Device description
Connection
POSPrinter¥TM-H5000...
XXXX TM-H5000 II M POS...
Pass-through(child)
CashDrawer¥DM-Z400...
OOOO DM-ZSeries Ca...
Pass-through(child)
Add NewDevice (N)
Check Health Interactive (C)
Device Specific Settings (S)
Add New LDN (L)
Communication Settings (O)
Delete (D)
Cut (T)
Export Registry (E)...
Property (R)
Help (H)
LineDisplay¥DM-D101
OPOS APPLICATION DEVELOPMENT
LineDisplay ¥DM-D101 is a parent device.
All devices hydra connected to this device
will be deleted.
POSPrinter¥TM-H1500IM
CashDrawer¥DM-Z400
OK to delete profiles?
Click YES to delete all child devices.
Click NO to delete only the parent device.
YES (Y)
NO (N)
CANCEL

FIG. 22

FIG.23(a)

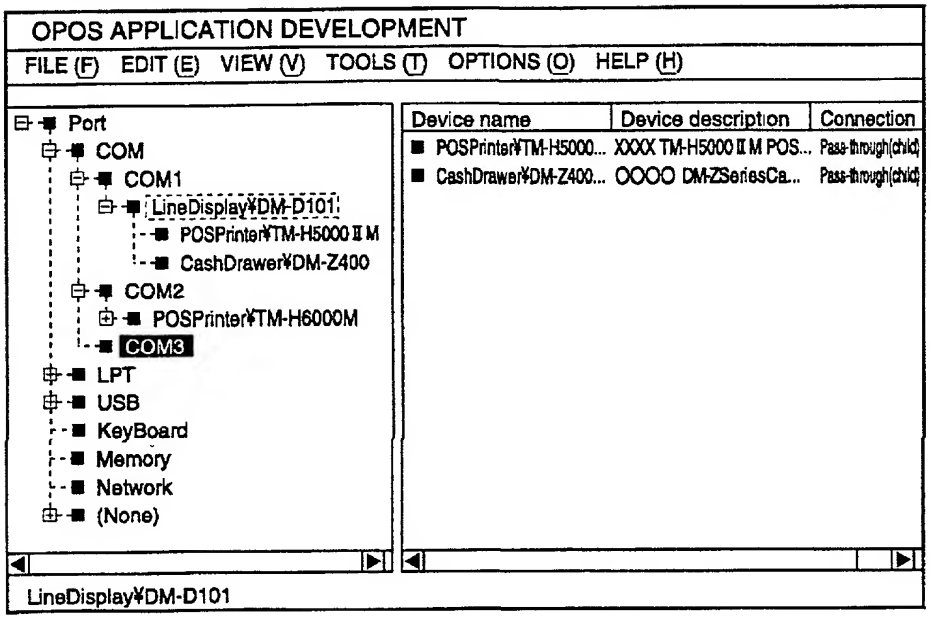
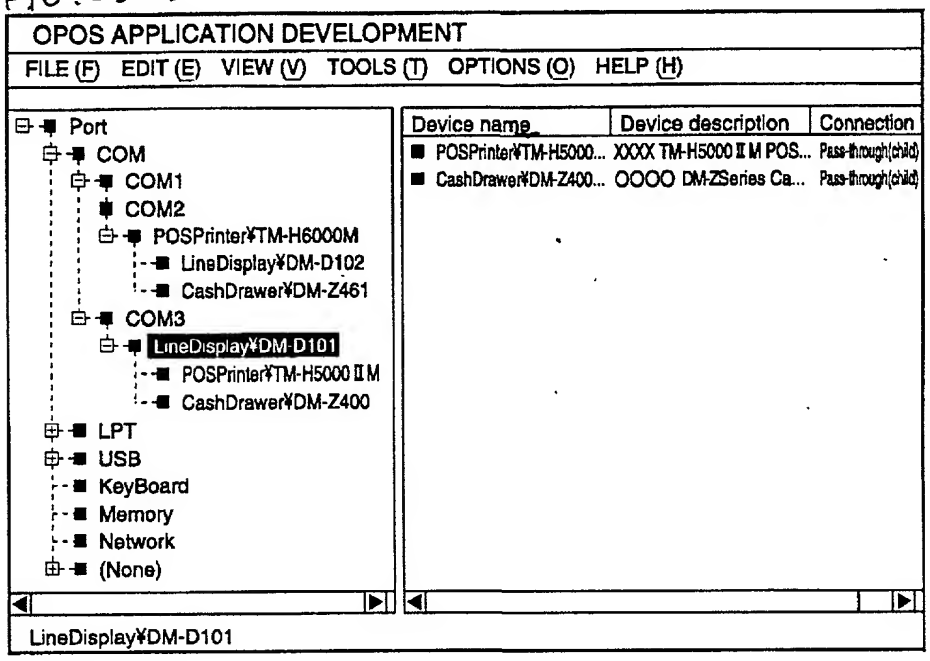



FIG.23(b)